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**United States Patent** [19]**Bugner et al.**[11] **Patent Number:** **5,614,340**[45] **Date of Patent:** **\*Mar. 25, 1997**[54] **MIGRATION IMAGING, OPTIONALLY  
WITH DYES OR PIGMENTS TO EFFECT  
BLEACHING**

## FOREIGN PATENT DOCUMENTS

PCT/US87/  
03249 12/1987 WIPO .[75] Inventors: **Douglas E. Bugner; William Mey,**  
both of Rochester; **Dennis R. Kamp,**  
Spencerport, all of N.Y.

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[73] Assignee: **Eastman Kodak Company,** Rochester,  
N.Y.[\*] Notice: The portion of the term of this patent  
subsequent to Jun. 6, 2015, has been  
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Stronghold (1 Page).[21] Appl. No.: **127,632**[22] Filed: **Sep. 27, 1993****Related U.S. Application Data**[63] Continuation-in-part of Ser. No. 745,661, Aug. 16, 1991,  
abandoned.[51] Int. Cl.<sup>6</sup> ..... **G03G 13/00; G03G 9/00;**  
**G03G 5/16; G02F 1/00**[52] U.S. Cl. .... **430/41; 430/39; 430/106;**  
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**250/318; 252/186.1; 252/583; 252/586;**  
**252/587**[58] Field of Search ..... **430/39, 41, 106,**  
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**250/316.1, 317.1, 318; 252/186.1, 586,**  
**587, 583**[56] **References Cited**

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*Primary Examiner*—George F. Lesmes*Assistant Examiner*—Bernard Codd*Attorney, Agent, or Firm*—John R. Everett[57] **ABSTRACT**

A bleachable composition, including an acid photogenerator and a near-infrared radiation-absorbing dye or pigment, is utilized in a method of migration imaging to prevent unwanted absorptions. This composition can be incorporated either in the thermoplastic imaging surface layer of the imaging element, in the marking particles applied to the element, or both. Alternatively, the components of the bleachable composition can be separated with one in the thermoplastic imaging surface layer and the other in the marking particles. After the imaging element is marked and exposed with near-infrared radiation, the bleachable composition caused exposed portions of the imaging element to be bleached. If further bleaching is needed, the element can subsequently be exposed with near-ultraviolet radiation. A migration imaging method, which does not employ the bleachable composition of the present invention, wherein marking particles are magnetically attracted to the imaging element, is also provided.

**20 Claims, 5 Drawing Sheets**